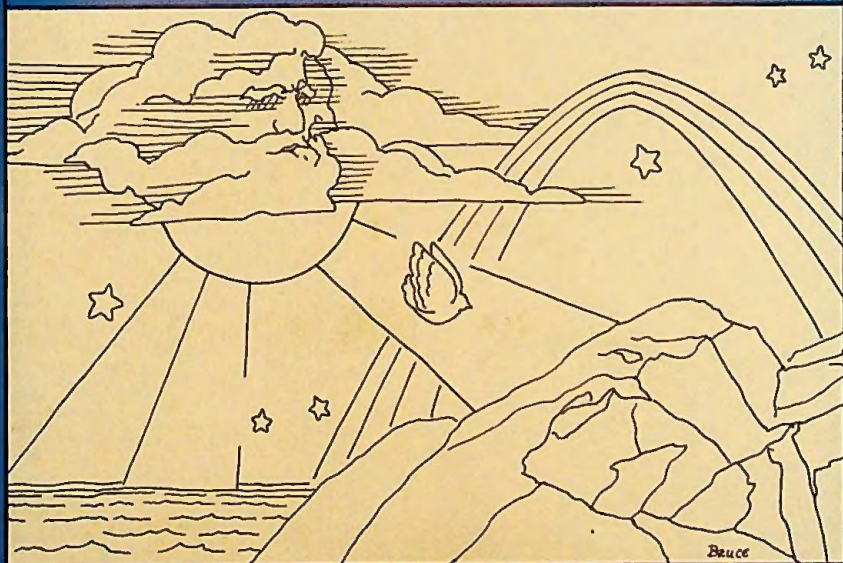# Creation

Social Science and Humanities

QUARTERLY

EDITORIAL

Dear Readers,

A Christian friend recently wrote me a letter asking some questions about my views on this and that. One of his questions had to do with my views regarding the issue of time and the age of the universe. His question reminded me of an incident that occurred a couple of years ago. Our local Bible-Science chapter had invited a well-known creation science speaker to come to Wichita. This particular speaker, though versed in many areas of the creation/evolution issue, is best known for his presentations of scientific evidence in support of a recent creation. As we conversed and moved from meeting to meeting I sensed rightly or wrongly a certain fear on his part that though I rejected evolution in general I might not "hold rank" with him on the age issue (I Chronicles 12.38). I sought to assure him then and I want to assure all our readers now that by God's grace I do intend to "hold rank" on that issue.

But though I state my conviction in this rather righteous tone I must confess that my conversion to the literal "creation week" position has more the character of Thomas' "Except I shall see . . . I will not believe" (John 20.25) than of Esther's courageous ". . . if I perish, I perish" (Esther 4.16). That may be why I couched my answer to the letter's question in scientific rather than Scriptural terms. Here is what I wrote:

> I am convinced on Scriptural and scientific grounds (let me here emphasize the latter) that our position is correct. I have studied that particular question more deeply than perhaps any other of the creationist arguments. This is perhaps because it is the most dramatic and controversial and where the potential for refuting the fundamentalist creation position is greatest. I have looked at the matter carefully and I must testify that the deeper I have dug the more solid the case for recent creation has seemed to me to become. I believe the scientific argument being put forth by the "creationist movement" is solid to the core. If I — with all my background and training and all the study I have put into this particular matter — am wrong in my assessment of the data in this one area, then I must say that my judgment and analysis of scientific evidence in all areas including psychology must be suspect. The case seems that clear to me. I sometimes say to my evolutionists colleagues with ironic and jestful tones but a serious undercurrent, "If the universe is so old then why did God make it appear to be so young."

In closing let me voice my sincere appreciation to our Lord for the "lively hope" He has granted me in just this one area of Biblical truth. The assurance of a recent creation as described in Genesis has been a great personal comfort and blessing to me. Thank you, dear Jesus, and praise be to Your holy Name.

<div align="right">

Gratefully,
Paul D. Ackerman
Editor

</div>

LETTERS AND COMMENTS

Dear Editor,

Of interest to readers of *CSSHS Quarterly* would be the story of "Bel and the Dragon," from the Apocrypha (in any Catholic Bible, the 14th chapter of Daniel). Here is a semi-Biblical example of a late dinosaur.

There is another aspect to the widespread dragon-serpent mythology of the world. I refer to the Uroboros, the cosmic dragon, often represented with its tails touching its head or in its mouth. The Uroboros encircles the world and time, indicating the circular nature of time. It can be found in Babylonia, Greece, Nigeria, India, Mexico, etc. (cf. Mircea Eliade, *The Myth of the Eternal Return* (also titled *Cosmos and History*), Princeton, 1971, pp. 37-42, 55-60).

The Uroboros encircles and guards the Edenic world-egg, out of which man has come. Often, man ascends out of the Edenic world-egg by slaying the serpent. However the myth reads, it seems to be universally acknowledged that the Uroboros serpent was the ruler and guardian of the original world.

This may be the origin of, or be related to, the stories of dragons guarding treasures.

From a Christian standpoint, the sacred character of serpents is not difficult to understand. The serpent-snake-dragon-Uroboros is associated with Satan, who pretends to be the god of this world. Thus, it is not surprising that non-Christian religions of the world ascribe to the Serpent the overlordship of time and space, and see him as the ruler of the original paradise from which man has come. Much work needs to be done in this area.

If the dinosaur provides us with a Creational backdrop for understanding the dragon mythology of the world, the Uroboros provides us with a "Fall" orientation. For the full picture, we need both.

Cordially in Christ,
James B. Jordan
Jackson, Ms.

CREATION SOCIAL SCIENCE AND HUMANITIES SOCIETY

The Creation Social Science and Humanities Society (CSSHS) was incorporated in Wichita, Kansas, in 1977. The CSSHS is educational, and will promote and disseminate information on the implications of the Biblical creation model of origins for the social sciences and humanities, with emphasis on the development of these disciplines in accordance with the rapidly emerging and increasingly well established natural scientific models of Biblical creation.

This **Quarterly Journal** is directed toward teachers and students of the social sciences and humanities, especially in institutions of higher learning. The CSSHS may also publish books, monographs, and other writings, and sponsor speakers, seminars, and research projects related to its educational purpose.

IRS tax-exempt status was granted December 30, 1977. All contributions are tax-deductible.

Voting membership is initially by invitation of the Board of Directors of the CSSHS to candidates eligible on the following basis:

a. persons with at least a baccalaureate degree in the social sciences or humanities; or

b. persons 18 years old or over, who have office in another creation-science organization with beliefs substantially identical with those contained in the CSSHS **Statement of Belief,** for at least one year immediately prior to applying for membership in the CSSHS. Voting membership dues are $10 (foreign, $11 U.S.) per year.

Sustaining membership is open to those who subscribe to the CSSHS **Statement of Belief.** Sustaining membership dues are $10 (foreign, $11 U.S.) per year.

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2. All basic types of living things, including man, were made by direct creative acts of God during the Creation Week described in Genesis. Whatever biological changes have occurred since Creation Week have accomplished only changes within the original created kinds.

3. The great Flood described in Genesis, commonly referred to as the Noa-chian Flood, was an historic event worldwide in its extent and effect.

4. We are an organization of Christian men and women who accept Jesus Christ as our Lord and Saviour. The account of the special creation of Adam and Eve as one man and woman in the image of God and their subsequent fall into sin is the basis for our belief in the necessity of a Saviour for all mankind. Therefore, salvation can come only through ac-cepting Jesus Christ as our Saviour.

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Overdesign As A Model For A Language

Dennis Farrell

There is widespread evidence to substantiate the contention that language is a designed or created communicative faculty, with accompanying complexity. The purpose of this paper is to present evidence to support the overdesign model and question the evolutionary viewpoint.

Overdesign is a concept which states that a capability is created with more than is necessary for its functioning. An entity would "demonstrate a remarkable combination of extremely efficient and economical organization on the one hand, and incredible potential for functional flexibility on the other".[1]

Linguists uphold the design model, probably a natural inference based on existing evidence. Chomsky, a well-known linguist and an evolutionist, says that we are "specifically designed" to learn language.[2] Wilson, a creationist, calls speech both "species specific and species universal" to human beings.[3] Linguists use these quotes to describe a "mechanism" that is unseen, but their inferences are based on the observable. Hockett has identified some unique design features of human language: sound is internally reinforced, that is, there is feedback; we possess interchangeability, or the ability to receive and transmit; we have semanticity, which is translating meaningful symbols into sounds; we have arbitrariness to transcend physical and tonal characteristics; we can be discrete, that is, sound and meaning of language may differ; we displace, i.e. our memory of the past in speech may be spatially removed; we are specialized in that our responses, and not energy, are significant; we have openness, that is, we can create new sentences. Humans, of course, retain tradition; prevarication allows us to skillfully lie and speak nonsense; linguists epitomize our linguistic reflectiveness, or our ability to discuss our own language; and finally, we can learn other languages.[4] Designed capability seems necessary to produce these variations, because communication of thought and meaning via symbols is so intricate.

If language is designed, it seems reasonable to propose that a natural linguistic complexity would result. The alternative would be an evolutionary development of simple animal sounds to complex human language. Later, this paper will show that language (grammar) had no previous "simpler" forms. Note that our proposition is not so much that man possesses language complexity, but rather, that this complexity results from design. Chomsky claims that human language complexity is "remarkable".[5] Rules of grammar bear this out very well; and consequently no language is simple.[6] Not only rules, but the child's language abilities and our overall use of language support a designed complexity. Even primitive tribes speak complex languages which in most cases are more grammatically complicated than civilized languages.[7] Thus the evidence of language complexity in human beings supports the language design model.

Because of the vastness of the topic, the present paper will not consider the subject of communication in animals. However, it may be necessary to state that

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though animal communication systems are vastly less complex than human language, careful examination of them would no doubt also reveal rich evidence of design. Recent efforts by psychologists to teach rudiments of human language to apes are extremely interesting and have revealed some dramatic results. These results are the consequence of rich design and programming on the part of the highly intelligent and dedicated scientists who designed and implemented the training program. It seems inconceivable that such results could come about by anything other than carefully controlled and intelligently designed procedures. Such results remind us of the importance of intelligent design requirements not only in the mature functioning of human language, but also in the acquisition of language by the child as well. This will be discussed in detail later. Nothing even approximating the directed and highly sophisticated language training program for apes is present for the human child as he learns to talk.

Returning to the topic of human language it can be said that if design is "species specific", then it would be found in all languages or "tongues". There should be universal similarities reflecting the design features in operation. Haugen calls language "the universal gift of tongues" and "the gift of language".[8] Notice the word "gift" used by an evolutionist. Wilson states that language is innate because all languages are "similarly designed" and fall within an "extremely narrow range of structural possibilities. . ."[9] Design, a word continually used in the literature by the linguists, is implied in the word "innate".

The following universal similarities explain Wilson's aforementioned narrow range of structure: all languages contain vowels and, at most, seventy phonemes; vowels always separate consonants; every grammar has a system; every language has "substitutionary" (pronouns) and "function" (in, or) words; all languages "borrow" from others and show a lack of distinction; nouns and verbs are universal; all languages have phonological systems of their own.[10] Structural similarity supports an underlying design original to all languages. The alternative hypotheses is that languages somehow (accidentally) became similar for some communicative reason. The design model seems to be more credible. Even word synthesis and its creativity is a universal human phenomenon.[11]

Chomsky infers an underlying universal abstraction which probably involves thought or "intention". It transcends communication[12] and fits our design model. An "intention" is more basic than structural similarities because it may direct the structure. A universal abstraction may also explain our ability to learn other languages; in other words, it may presuppose a design that would accommodate the speaking of any language. The similarities of languages would also facilitate multi-language learning since they are based on design, and positive transfer could occur.

There is, however, something that supports not only universal design, but also its complexity. This is the presence of a universal grammar (UG) and its concomitant rules. Do not mistake this UG for the abstraction that Chomsky spoke of. The abstraction, an "intent", probably directs the usage of the UG rules. If there is a UG, then it follows that there is a basic innate design, since all languages contain rules.

History reveals a belief in universal grammatical rules, an inference which seemed inescapable as far back as the 17th and 18th centuries, when linguists

searched for rules in language that would show the universality of human thought.[13] Both Boethius of Dacia and Thomas of Erfurt considered all languages basically similar, probably because of their belief in a UG. They claimed that "...all languages reflected certain immutable categories of the human mind and the world...".[14] It is quite possible that these "immutable categories" were their terms to describe design. Chomsky is the leading contemporary spokesman of the UG. He says that the mind contains "an autonomous system of formal grammar, determined in principle by the language faculty and its component UG".[15] The UG is good design evidence because of its function, and because of the fact that it is already contained in the mind.

Exactly what is the UG, and how does it illustrate complexity? UG is a "system of principles" consisting of "general properties of (any) human language" and is therefore necessary for the acquisition of language. These principles are not acquired by learning, which means that the language "faculty" is both universal and "innate".[16] Chomsky presents a viable argument for design with words like "faculty" and "innate", emphasizing that these principles are not acquired by learning. The correct use of grammar rules when speaking is so complex that is seems to presuppose design.

Complexity of principle usage is more specific. Two components constitute language, namely, structure and meaning. "Deep structure" is universal and related to meaning or "intent". "Surface structure" is phonetic (language sounds), containing its own rules according to the language (nationality).[17] "Deep structure", then, would embody the universal principles which govern the transformation of meaning into sounds. By obeying universal grammatical rules, phonetics would emerge within the given grammatical framework of a particular language, or surface structure. This transformation would explain why we are always correct in our word order. For example, a person would never say, "I home went." Because of the UG or deep structure, he says the sentence correctly. The phonetics simply disclose which language and therefore which rules are involved. Chomsky's UG may represent a design by which these transformations, or any other grammatical processes, can occur.

Despite the present language diversity, there is historical evidence pointing to a common source of all languages. This evidence would not only bolster the design model, but also explain the universal similarities. This common "ancestry" was probably an original language, because languages, by comparison, contain similarities that go beyond accident, tradition, or "linguistic universals".[18] However, one "linguistic universal" that suggests a first language is the similarity of the world's "phonological systems", which supposedly places their date of original oneness forty or fifty thousand years ago. To some commentators this similarity constitutes a problem because present diversity cannot account for it.[19] While the postulated date is no doubt inaccurate, there is the important inference of origin due to similarities.

Finally, the "universality of the human mind" is emphasized as indicative of a common "ancestry". In 1786 Sir William James claimed that Sanskrit, Greek and Latin shared a common "ancestry", but linguists investigated "language similarities" instead of studying the mind itself.[20] Perhaps in pre-evolutionary days linguists were not biased when inferring the reason(s) for language similarities.

A study of the origin of language might naturally bring to mind a genetic re-

lationship. There is disagreement on this point, however. Watkins states that languages are related genetically.[21] Haugen, on the other hand, says there is no "biological descent" because there are no language genes.[22] Here, Haugen seems to contradict his own contention that language is a "gift" which subsequently would be passed on down to all descendants from the first members of the species.

Haugen also says that language diversity and resulting phenomena are a consequence of scattering and learning.[23] He claims that we learn language as a product of the specific phenomena within a cultural group after its scattering; that is, we learn according to our environment and tools of learning. But his reference to the word "gift" and the evidence of language acquisition contradict this learning hypothesis. Furthermore, he infers an original language by recognizing that an historical study reveals similarity, and no other explanation for this similarity suffices.[24] Despite language diversity which will be explained as non-contradictory to design, biological descent could and probably did occur. If there was an original language, it is reasonable to infer an original design for mankind to utilize this language "gift"; however, later something occurred (i.e. Babel) to cause the present diversity of languages.

Universal complexity offers further support for the design model. Everyone will agree that language is not simple. One of the most complicated language capabilities, and therefore strong evidence for design, is the process of naming, another example of Chomsky's expert analysis of human language.

According to Chomsky, naming involves categorizing parts of a whole, an "arrangement", within the framework of the Gestalt, or "spatiotemporal contiguity". For example, we can see the parts of an automobile scattered on the ground as meaningless; but once these parts are assembled ("arranged"), they can be categorized or named. The Gestalt allows a perception of the figure-ground relationship or of the parts into the completed whole (automobile). Chomsky uses the example of a painting of a floral arrangement, which the artist names according to his perception (expression of an idea). Naming, then, is assigning the object named to a category or framework of objects or concepts.

Naming includes more than this assignment, since reality is more than parts of a whole. Chomsky refers to "natural kinds" or objects, which represent facts of experience. We must somehow categorize objects and do so by defining these "natural kinds" according to function, constitution, and origin. A shoe is so named because it arbitrarily fits our concept of what it does, is, and whence it came. The latter may also involve word entymology, indicating a relationship to the roots of words. The naming process includes novelties which we name according to "essential properties" within the object. Regardless of the word we choose, naming depends on how we conceptualize the extraneous facts.

The ability to form concepts underlies the naming process. Chomsky suggests an "internal structure" for conceptualization to occur. Our perception of reality leads to formulation of a concept, and subsequently to a category from which a name (symbol) appears.[25] The process of naming is indeed complex, and the language design model would account for the seemingly simple task of assigning a word to an object.

One of the most remarkable feats of the human being is the acquisition of language. A child can accomplish this complex task at an early age. There is

good evidence for a designed capability, because children all over the world learn language in the same way. In fact, there are "striking uniformities" in other cultures that follow grammatical principles.[26] Even deaf, blind and mentally impaired children can learn language.[27] These facts lead to an inference of "innate tendencies",[28] which indicates design.

Although we speak of language as learned, it is really acquired as something "natural", reducing the necessity of rewards.[29] It is learned in the sense that the child learns the langauge of his nationality, with its peculiarities. The ability to speak requires no formal or systematic training of any kind in the behaviorist sense.[30] The environment (rewards) may modify speech, as in the example of idioms or naming, but has little influence on rules of grammar. The child simply needs interaction with the environment (people) to release language's "inherent capacity";[31] which is made up of grammatical rules.

Cultural differences are lacking in the first four years of the child's life. During this period children universally show their ability to iterate and comprehend sentences they have never heard. If this is the case, learning (imitation and reinforcement) cannot offer a plausible explanation.[32] Some of the specific evidence contraindicating grammatical learning follows.

The key to understanding how design supersedes training in language acquisition is the child's grammatical usage. Chomsky theorizes that children inherently know how to use language because of a "structure dependent rule".[33] To understand this "rule", recall Chomsky's earlier reference to "deep structure" which contains the universal principles to transform meaning into sounds according to grammatical rules. Apparently, deep structure, because it depends upon the structure dependent rule, would allow the proper use of grammar when the child speaks. An example of proper unlearned rule usage is the morpheme. Morphemes are the smallest meaningful units of speech. As the child develops linguistically, morpheme use follows a specific "grammatical" pattern that produces a logical word order. "See boy", "see boy run", "see boy run street" are always grammatically correct. The child will never say "boy see", unless that was the intent, or "run boy see", etc. Past participles provide further evidence of the child's inherent knowledge of rules. Saying "teached" instead of taught follows the rule. The child will always make this "mistake" which is more logical than "taught". The latter does not follow the rule and must be learned as a peculiarity of language. Plurals also obey the rules as in the example of "thems" instead of them. Not only does "thems" follow the rule, but them is a collective noun which makes little sense to the child. No matter how much we try to teach (reinforce) the child to say "taught" or "them", he will always follow the rules until about five years old when reinforcement dominates. Design explains language acquisition very well because training does not enhance or decrease grammatical usage. In other words, an alternative explanation is lacking.

Another indication of the design feature in language acquisition is the child's rapid progress. In the first four years comprehensibility increases from 26 to 99.6%. The child adds fifty new words per month between the ages of three and five resulting in a large vocabulary, while increasing parts of speech and grammatical complexity. Children utilize all parts of speech in adult sentence forms. Sentence length increases from four words at age two to eight words at age four. Articulation increases from 32% at age two to 100% at age eight. Biehler says

these facts have eluded explanation so far.[34] "Eluded" is right, because they suggest an overdesign. Rapidity supports the design model and refutes any behavioristic explanation. The child would have to learn too much too quickly.

The child's early use of the naming device also exemplifies linguistic complexity. His first words are nouns, which indicates the cognitive importance of categorizing or naming objects of experience (reality). Parental reinforcement determines the appropriate words. Wilson calls this early categorizing of the environment "labelling".[35] The appearance of nouns as first words could manifest the early activation of a designed device. Later, when various verb types surface, grammar rules develop.

Chomsky has inferred a structure which may explain language acquisition. Presently, there is no "satisfactory explanation" of grammar acquisition, but evidence of a universal grammar imply a language acquisition device (LAD).[36] According to Chomsky, this "grammatical device" is "universally applicable" and results in "grammatical competence" in attaining any language. The proposed model is:

linguistic data —→ LAD —→ grammatical competence.

This device may explain why all children speak grammatically correctly.[37] It would govern the structure dependent rule that directs correct usage of grammatical rules. This device also qualifies as a designed structure for the purpose of language acquisition.

(We will publish the conclusion of this article in the next issue of the CSSHS *Quarterly in which the author presents evidence from experts in linguistics (evolutionists) which supports biological language design.)*

1   Paul D. Ackerman, "Considerations Regarding a Model for Experimental Psychology," *Acts and Facts*, Impact Series no. 50, 6, no. 8 (August 1977), ii.

2   Noam Chomsky, *Reflections On Language* (New York: Pantheen Books, 1975), p. 4.

3   Clifford Wilson, "Some Aspects of Human Communication Compared and Contrasted with Animal Communication," *Unpublished Personal Notes*, p. 9, All of Dr. Wilson's articles were obtained through personal correspondence.

4   Clifford Wilson, "The Silent Ape," Extracts from forthcoming publication, pp. 2-3.

5   Chomsky, p. 4.

6   Clifford Wilson, "Compiled Notes," *Unpublished Personal Notes*, 1975, p. 1.

7   Henry Morris, *Scientific Creationism* (San Diego: Creation Life Publishers, 1974), pp. 184-85.

8   Einar Haugen, "The Curse of Babel," *Daedalus*, 102, (Summer 1973), 48.

9   Wilson, "Compiled Notes," p. 8.

10   *Ibid*, pp. 23-24

11   Wilson, "Attempts To Teach Language to Apes," p. 8.

12   Chomsky, pp. 64-65.

13   Morton Bloomfield, "The Study of Language," *Daedalus*, 102, (Summer 1973), 9.

14   *Ibid*, p. 7.

15   Chomsky, p. 43

16   *Ibid*, pp. 11, 28, 118, 219.

17   Paul Mussen, John J. Conger, and Jerome Kagan, *Child Development and Personality, 3rd Ed.* (New York: Harper and Row, 1969), pp. 249-50.

18   Calvert Watkins, "Language and Its History," *Daedalus*, 102, (Summer 1973), 99.

19   Wilson, "Compiled Notes," p. 24, citing Charles F. Hockett, *Universals of Language*, p. 28.

20   Bloomfield, p. 9.

21   Watkins, p. 99.

22   Haugen, pp. 48-49.

23   *Ibid*, p. 48.

24   *Ibid*, p. 49.

25   Chomsky, p. 44.

26   Robert Biehler, *Child Development: An Introduction*, (Boston: Houghton Mifflin Co., 1976), p. 314.

27   Wilson, "Compiled Notes," p. 2.

28   Biehler, p. 434.

29   Wilson, "Attempts To Teach Language To Apes," p. 7.

30   Chomsky, p. 4.

31   Clifford Wilson, "Language: Is It Acquired or Learned? A Study Based on the Wilson Language Abilities Guide," *Unpublished Personal Notes*, p. 1.

32   Biehler, p. 314.

33   Chomsky, pp. 31-32.

34   Biehler, p. 435.

35   Wilson, "Attempts To Teach Language to Apes," p. 7.

36   Mussen, p. 254.

37   *Ibid*.

An Introduction to
John W. Robbins' Review of
Criticism and the Growth of Knowledge

We may consider three alternative foundations for constructing human knowledge: Reason, empirical sensation, and faith. In the past, man through philosophy tried unsuccessfully to build on the foundation of human reason. More recently man through science has attempted to build on the foundation of empirically verified fact. As Christians I believe we should argue that the proper starting place and foundation for all human knowledge is faith. Whether Christian, atheist, agnostic, or whatever, as human beings we are forced to begin our calculations and examinations with certain principles of faith. The importance of the kind of analysis which is the concern of Robbins' review is in dealing with those who believe that empirical science can stand alone without faith. This view has been called "scientism." The attitude of "scientism" is reflected in the following quotation by Karl Pearson from his book, The Grammar of Science:[1]

> "...*modern science does much more than demand that it shall be left in undisturbed possession of what the theologian and meta-physician please to term its 'legitimate field.' It claims that the whole range of phenomena, mental as well as physical — the entire universe — is its field. It asserts that the scientific method is the sole gateway to the whole region of knowledge."* p. 24

Robert Fischer in a little book called Science, Man and Society[2] *includes an excellent discussion comparing science and scientism. Fischer defines science as "the body of knowledge obtained by methods based upon observation." "Scientism," on the other hand, is defined as "belief that only such methods can fruitfully be used in the pursuit of knowledge." Fischer goes on to describe scientism as a "world-view," an "ideology," as in fact "a de-Godized religion."*

Fortunately, most scientists do not believe in "scientism." Fischer[2] feels, in fact, that there are more adherents of scientism among nonscientists than among scientists. Most scientists admit that they start with certain assumptions that can't be proven and proceed from that starting point of faith. Most evolutionists realize that there is a strong element of faith in their scientific views. But they would say that given the element of faith, the admittedly circumstantial and not conclusive evidence is such that it is most reasonable to believe in evolution as opposed to special creation.

The answer to the latter view is being made by the popular creation science ministries of such Christian brothers as Henry Morris and Duane Gish of the San Diego based Institute for Creation Research. They argue and present scientific evidence for the "circumstantial" and "reasonable" superiority of the special creation viewpoint.

The answer to scientism, on the other hand, is the kind of analysis illustrated in this excellent review by John Robbins. This type of argument is philosophical rather than scientific in nature and is aimed at showing that science cannot stand by itself as a means of establishing absolute knowledge. Both ministries make an important contribution in the defense and furtherance of the gospel.

<div align="right">Paul D. Ackerman</div>

REFERENCES

Pearson, Karl, *The Grammar of Science,* London: Adam and Charles Black, 1911.

Fischer, Robert B., *Science, Man, and Society,* Philadelphia: W. B. Saunders Co., 1971.

BOOK REVIEW

Criticism and the Growth of Knowledge, ed. Imre LaKatos and Alan Musgrave Cambridge University Press, 1970, 1974. 278 + index. $4.95.

by JOHN W. ROBBINS*

The conflict between science and the Bible, between Science and Christianity, or between "reason" and "faith" in broader terms, is an old one. Ever since the middle of the nineteenth century and the publication of *Origin of Species,* Christians have been on the defensive. And they have been on the defensive because they have accepted and believed the myth that science furnishes truth. Sad to say, most Christians have not kept up with the battle and still cling to the idea that there are at least two roads to truth: science and the Scripture. Consequently, they spend most of their time trying to reconcile science and Scripture in such a way as not to offend the "reason" of the natural man. In so doing — in accepting the premise that science is a cognitive enterprise that, properly pursued, leads to truth — these Christians have been doing a disservice to truth and to Christianity. Because most Christians have not read the account of the last battle, they have made almost no contributions to the fray, and the decisive and strategic maneuvers have been made by the non-Christians. Books published by Christians have accepted in one form or another the idea that there are two means of learning truth — that is, that science can and does provide us with truth, *in addition to* the Bible. But if one admits that premise, then one has implicity given up the case for Christianity. For while it does not necessarily follow that because one method properly applied leads to truth, it will lead to other, or all truths, it does give epistemological standing to that method and establishes the right of its practioners to demand that all other alleged truths conform to the "facts" discovered by their method. The battle between the Bible and autonomous science is, therefore, a total war. If one millimeter is allowed to science, it will soon take a kilometer. For that reason, any attempt to "harmonize" or "reconcile" science and the Bible as sources of truth is futile. If science be given epistemological standing, it will — and has the right to — demand that all other claimants to truth must bow before it. Science must be seen not as a cognitive enterprise, but as a manipulative enterprise. It provides not truth, but, at best, fallible directions.

Unbeknownst to most Christians is the fact that the two leading philosophers

of science today, Thomas Kuhn and Karl Popper, have already conceded the fact that science is non-cognitie. Kuhn, in his *Structure of Scientific Revolutions*, has subjected science to a perspectivist analysis and destroys the view that science consists in the steady and linear accumulation of knowledge. Science, rather, is characterized by paradigms, and paradigmatic changes are revolutions in scientific thought, for successive paradigms are irreconcilable. "Neutrality" and "objectivity," two of the putative qualities of the "impartial scientific observer," are myths, for "scientific fact and theory are not categorically separable" (*Structure*, p. 7). Popper, in his *Conjectures and Refutations*, holds that science is just that: conjectural and refuted. No scientific fact or theory can be proved true; it can only be disproved and then only tentatively. He writes that: "Science has nothing to do wih the quest for certainty or probability or reliability. We are not interested in establishing scientific theories as secure, or certain, or probable" (*Conjectures*, p. 229). "It can even be shown that all theories, including the best, have the same probability, namely zero" (*ibid.*, p. 192). And finally, "our attempts to see and to find the truth are not final, but open to improvement; that our knowledge, our doctrine, is conjectural; that it consists of guesses, of hypotheses, rather than of final and certain truths" (*ibid.*, p. 151).

Now the book that this review is concerned with is a series of essays on Kuhn's philosophy of science, and the essayists include such thinkers as Kuhn himself. J. W. N. Watkins, S. E. Toulmin, L. Pearce Williams, Karl Popper, Margaret Masterman, Imre Lakatos, and Paul Feyerabend. All the essays are good, but there is one outstanding essay by Lakatos that deserves the attention of all Christians. Lakatos, formerly professor of logic at the University of London, and now of the London School of Economics, titled his essay "Falsification and the Methodology of Scientific Research Programmers." In that essay he presents an overview of the development of various philosophies of science, beginning with the view that science provides proven knowledge. He writes:

> For centuries knowledge meant proven knowledge — proven either by the power of the intellect or by the evidence of the senses. . . . The proving power of the intellect or the senses was questioned by the sceptics more than two thousand years ago, but they were browbeaten into confusion by the glory of Newtonian physics. Einstein's results again turned the table and now very few philosophers or scientists still think that scientific knowledge is, or can be, proven knowledge. But few realize that with this the whole classical structure of intellectual values falls in ruins and has to be replaced: one cannot simply water down the ideal of proven truth — as some logical empiricists do — to the ideal of "probable truth" or — as some sociologists of knowledge do — to "truth by (changing) consensus." (pp.91-92).

Popper, Lakatos writes, has grasped the full implications of the collapse of the ideal of proven truth, and thus has arrived at the position that the proper scientific procedure is not to try to prove theories — for that cannot be done in any case — but to try to disprove them. One makes conjectures, in the Popperian program, and then specifies under what conditions the conjectures will be refuted. Science consists of conjectural or refuted theories, never proven ones. To the first position, that science consists in proven truth, Lakatos assigns the name

"justificationism." To the second position, that the proper scientific method is to seek to disprove conjectures, Lakatos assigns the name "falsificationism." Since justificationism has been seen to be logically indefensible (for all scientific procedures commit the *fallacy of asserting the consequent*),† the philosophers of science have arrived at the conclusion that *"all theories are equally unprovable"* (p. 95), emphasis is Lakatos'. Unfortunately, Christians have not yet grasped that point, and are carrying on an argument that the scientists already admit they have lost.

Many scientists and philosophers were unhappy with the conclusion that all scientific theories are unprovable, and sought to lower the standard from proved truth to probable truth. Lakatos writes:

Of couse, replacing proof by probablity was a major retreat for justificationist thought. But even this retreat turned out to be insufficient. It was soon shown, mainly by Popper's persistent efforts, that under very general conditions all theories have zero probability, whatever the evidence; all theories are not only equally unprovable but also equally improbable. (p. 95)

For the argument demonstrating that all theories have zero probability, I refer the reader to Gordon Clark's *Philosophy of Science and Belief in God,* pages 62-64. With the demise of probabilism — a demise that could have been hastened if Augustine's demonstration that one cannot know what is probable unless one first knows what is certain — falsificationism swept the field. And among the falsificationists, two schools emerged: the *dogmatic* falsificationists and the *methodological* falsificationists.

The hallmark of dogmatic falsificationism is then the recognition that all theories are equally conjectural. Science cannot *prove* any theory. But although science cannot prove, it can disprove: it "can perform with complete logical certainty (the act of) repudiation of what ▮ false," that is, there is an absolutely firm empirical basis of facts which can be used to disprove theories. (p. 96)

Lakatos proceeds to show that dogmatic falsificationism is untenable because it rests on two false assumptions. The first of these assumptions is that "there ▮ a natural, *psychological* borderline between theoretical or speculative propositions on the one hand and factual or observational (or basic) propositions on the other" (p. 97). The second false assumption is that "if a proposition satisfies the psychological criterion of being factual or observational (or basic) then it is true; one may say that it was *proved* from facts" (pp. 97-98). Regarding the first assumption Lakatos gives the example of Galileo:

Galileo claimed that he could "observe" mountains on the moon and spots on the sun and that these "observations" refuted the time-honored theory that celestial bodies are faultless crystal balls. But his "observations" were not "observation" in the sense of being observed by the — unaided — senses: their reliability depended on the reliability of his telescope — and of the optical theory of the telescope — which was violently questioned by his contemporaries. It was not Galileo's — pure, untheoretical — *observa-*

tions that confronted Aristotelian theory but rather Galileo's "observations" in the light of his optical theory that confronted the Aristotelians' "observations" in the light of their theory of the heavens. (p. 98)

Lakatos concludes from this and other arguments that "there are and can be no sensations unimpregnated by expectations and therefore *there is no natural (i.e., psychological) demarcation between observational and theoretical propositions*" (p. 99).

Regarding the second false assumption made by dogmatic falsificationism, Lakatos presents a conclusive argument:

> . . .the truth value of the "observational" propositions cannot be indubitably decided: *no factual proposition can ever be proved from an experiment.* Propositions can only be derived from other propositions, they cannot be derived from facts: one cannot prove statements from experiences — "no more than by thumping the table." This is one of the basic points of elementary logic, but one which is understood by relatively few people even today. (p. 99)

From these considerations, Lakatos draws the quite obvious conclusion that science can neither prove nor disprove propositions: "all propositions of science are theoretical and incurably, fallible" (p. 100).

One wishes that it had been a Christian philosopher who developed that argument; it is both embarrassing and annoying to realize that it is the Christians who are so oblivious to the development of the philosophy of science that they still maintain that scientists can discover truth. The philosophers of science have handed us the weapons to destory one of our most important intellectual antagonists — secular science itself — and we Christians are apparently too ignorant or too stupid to use those weapons. May God forgive us our intellectual sins.

To return to Lakatos, he is not content to let the argument end at this point. He goes on to offer a third reason why dogmatic falsificationism would be useless for disproving theories: *"the most admired scientific theories simply fail to forbid any observable state of affairs"* (p. 100). Recall that dogmatic falsificationism requires that a scientific theory, to be scientific and not "metaphysical," must specify *conditions* under which it would be *disproved.* But the best scientific theories do *not* specify such conditions; Lakatos illustrates the point by imagining a story about a case of planetary misbehavior:

> A physicist of the pre-Einsteinian era takes Newton's mechanics and his law of gravitation, (N), the accepted initial conditions, I, and calculates, with their help, the path of a newly discovered small planet, p. But the planet deviates from the calculated path. Does our Newtonian physicist consider that the deviation was forbidden by Newton's theory and therefore that, once established, it refutes the theory N? No.

The physicist simply says there must be an unknown body causing the deviation from the predicted path. If present telescopes are unable to discover that unknown body, bigger and better ones are built. If they are not adequate to discover the unknown planet, satellites are launched. And if they are unable to dis-

cover the unknown cause of the "deviation," the scientists invent other reasons why the unknown body cannot be discovered. And so the process continues. It is not the Christians who postulate leprechauns behind every tree who become invisible if one looks for them, but the scientists; for as Lakatos says, "it is exactly the most important, 'mature' theories in the history of science which are *prima facie* undisprovable in this way" (p. 102).

Lakatos is not satisfied with this conclusion, and he attempts to construct a sophisticated methodologial falsificationism that escapes skepticism and irrationalism. He realizes how close to utter bankruptcy science is and tries as best he can — he is no mean logician — to rescue science from skepticism and irrationality. In this valiant attempt, he is not successful, and could not be. The noncognitive nature of science is established once the justificationist position — the idea that scientific knowledge is proven knowledge — has been rejected. No amount of logical fine tuning of any variety of "falsificationism" can bridge the gap between opinion and truth. And Lakatos admits as much in his discussion of the decisions that must be made by a sophisticated methodological falsificationist, decisions that are inevitably arbitrary:

> But even this appeal procedure cannot do more than *postpone* the conventional decision. For the verdict of the appeal court is not infallible either. When we decide whether it is the replacement of the "interpretative" or of the "explanatory" theory that produces novel facts, we must again make a decision about the acceptance or rejection of basic statements. But then we have only *postponed* — and possibly *improved* — the decision, not avoided it. The difficulties concerning the empirical basis which confronted "naive" falsificationism cannot be avoided by "sophisticated" falsificationism either. (p. 131)

There is, then, no escape from the conclusions that autonomous science can prove nothing, that it can disprove nothing, and that, therefore, it is not a means of cognition at all. Scientists are, in the words of Paul, ever learning and never able to come to the knowledge of truth. The long essay by Lakatos (105 pages) is itself worth ten times the price of the book. ∎

†The fallacy of asserting the consequent is one of the many logical problems science faces, but it is, perhaps, the most obvious and most damaging. It consists in arguing: if p, then q; q, therefore, p. A simple example is: if it is raining, the ground is wet; the ground is wet; therefore, it is raining. Scientists argue in this way: if a theory is true (p), it will have a certain result (q). An experiment is devised and performed, and the predicted result (q) is observed. The scientists then conclude, quite illogically, that the theory is true. *All* scientific investigation commits this logical fallacy.

METAPHOR: AN EVIDENCE FROM DESIGN OF THE CREATION MODEL PART II

Kathy Lynn Hutson

A. AS AN ELEMENT OF LITERATURE

How is it, then, that metaphor is an evidence from design of the creation model?

First, as an element of literature the prominence of metaphor gives mute testimony to a consistent, almost sub-conscious awareness in man of the unity of nature. This constant comparison and analogy between two objects or phenomena in the empirical realm, or between the empirical and the metaphysical realm, attests to man's inner knowledge that the variable elements of nature (diversity) exist within a consistent framework (unity). The historical philosophical struggles between Grace and Nature, unity and diversity, the One and the Many are reflected in the consciousness that one can learn from the diverse pieces of nature something of the unified field, and likewise learn truth about the pieces from the unifying concepts.

A confidence in this "psycho-physical parallelism," as Lewis called it, can only come from a base of supernatural creation. Chance selection does not produce order; nor diversity of matter, unity of mind. Whenever a poet compares two different things, commits a semantic transgression, crosses linguistic boundaries, he expresses confidence in the basic unity behind two different linguistic categories, from which he can transmit, in the words of Shelley, "the before unapprehended relations of things."[42] Given the creation model, this unity is perfectly understandable. The same Creator who made the diverse natural phenomena, made the mind of man; thus the two would be expected to exist in harmony. Furthermore, one would predict that the handiwork of this personal God would reflect His nature, just as the works of man reflect his. Since the creation model presupposes a perfect, personal, omnipotent Deity, all ultimate Truth would reside in Him and be reflected in the diversity of His creation. And thus, the Scriptures attest to the fact that all creation teaches, not comprehensive truth, but *some* truth about the ultimate Reality (Rom.1; Ps. 19). Therefore, the only basis for valid metaphorical comparison and analogy between the diverse objects of nature is supernatural creation; as a corollary, the ages-long persistence of metaphor as the essence of poetic expression witnesses to the truth of the creation model.

Another teleological aspect of metaphor as an element of literature includes the creation mandate, the fact that in Genesis 1, God directs man to subdue and rule the earthly creation; and in Genesis 2, to name the animals. The act of naming (naming well, that is) requires an understanding of the object to be named. Adam named the animals by examining them; and having

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come to some understanding of their nature, gave each a suitable title. This represents the first step of man in ruling nature; understanding enough to intellectually subdue the diversity of the creation about him. "Intellectual subduing" is the essense of poetic expression, as in Wheelwright's statement that metaphor "partly discloses hitherto unknown aspects of What Is." That is the repeatedly avowed goal of the artist, to give the viewer/reader a new, revelatory perspective through which to better understand, and thus to control, the diversity around him. Thus, skillful poetic expression is an extension of subduing and naming, through the wise use of metaphoric relationships. In the Bible skillful poetry and prose are called wisdom literature and are full of metaphorical expressions (e.g., Proverbs, Song of Songs).[43] D.A. Hubbard summarizes the relationship of wisdom writing and man's subduing:

> Theologically wisdom has as one of its functions an explication of Genesis 1-2. It is part of the outworking of God-given commands to subdue the earth and name the animals. Understanding the creation is not merely a means of success for man, it is a divinely-designed way of blessing. By acquiring and applying wisdom man fulfills one of the purposes for which he was created.[44]

An interesting note here, by way of example, on the wisdom of Solomon is that this king was called the wisest man on earth. I Kings 4 indicates that Solomon had a high degree of knowledge about the plant and animal kingdom. Since his proverbs and songs are full of references to the natural realm, is it not possible to speculate that the human means of gaining his extraordinary wisdom was observation and correlation of this empirical data, combined with semantic transgression, resulting in the highly metaphoric poetic revelation of Proverbs, for example? There is a basis, then, in the creation model for gleaning wisdom from metaphoric activity. The evolution model has no such basis, which is the subject of the following section.

B. AS A PRINCIPLE OF LANGUAGE AND THOUGHT

Metaphor is also an evidence from design of the creation model in its broader role as a principle of language and thought. However, it will be enlightening to examine first the plight of language and metaphor in the evolution model.

1. In The Evolution Model

This can best be accomplished by examining metaphor in light of the three main principles of the evolution model mentioned in Section II: 1) naturalism, 2) net increase in complexity, and 3) uniformitarianism.

First, language, in line with *the naturalistic character of the evolution theory*, was originated completely by man. Thus, it is subject to the limitations of man's perceptions; accordingly, language and categories began exclusively as an inductive process. But herein lies the problem. If man alone created language, how does he have any assurance, given the imperfection of human perception, that his words correspond accurately with the nature of things, What Is? It is here that the philosophical implications of "radical" or "necessary" metaphor discussed in Section II come into play. For if there are truly thoughts that *require* metaphors as their only means of expression, then the thoughts depend upon the metaphors. Wheelwright's words must haunt the evolutionary thinker: semantics and ontology are inseparable; the latter is dependent on the former. It is also Wheelwright who, in discussing the differ-

ence in the Western and Eastern mind, asserts that the translation and publication of the Oriental classics in the late 1800's has had as great a philosophical impact on the West as Darwin. He then quotes a common Eastern view of the language/truth question from the *Tao Teh Ching:* "The Tao (Reality) which can be spoken is not the real Tao,"[45] citing this as the oldest clear expression of the basic semantic dilemma. There is, then, a barrier between the human subject and the object he seeks to know. This linguistic-epistemological dilemma arises from the belief that man alone created language.

But humanists have a "hope," by which they try to avoid a final dilemma. It begins with their theory of the origin of language. The classic debate on the subject is found in *Cratylus* between Aristotle and Plato over whether the words originally chosen for objects had or had not some natural kinship with the things they were chosen to designate.[46] History has basically sided with Aristotle, according to Brown, agreeing that there were few cases of kinship, most words being arbitary sound-symbols. Later, as the scenario goes, words were chosen for ideas and concepts by means of metaphor.[47] Man began, then, by creating sound-symbols for objects, and later used those symbols as comparisons to express conceptual thought. As Hudson Maxim states: "Man parted company with the brute when he began to have ideas which could not be expressed by ... arbitrary symbols of concrete ideas."[47] Note, however, there is no indication here of the *source* of these abstract ideas. Brown also quotes the famous philologist Max Muller:

> The fact that all words expressive of immaterial conceptions are derived by metaphor from words expressive of sensible ideas was, for the first time, clearly and definitely put forth by Locke, and now is fully confirmed by the researches of comparative philologists.[49]

The "hope" then of the evolution model comes from the theory of the upward development of the mind of man. These new ideas which came inexplicably to man's mind and sought metaphorical expression are prototypes of how metaphor shall continue to "mediate" between man and truth, or as it were, between heaven and earth. The semantic dilemma that Wheelwright so effectively perceived in the words of the Tao he cannot accept as an ultimate dilemma. He writes:

> Attempts to express and justify the inner meaning of What Is are notoriously difficult .... But the doom is not complete; for *by imaginative language some inroad, genuine though a slight, can be made into the semantic wilderness.* Since imaginative language is basically metaphoric ... there is a natural collusion between metaphor and myth in man's attempts to discover and utter "the inner meaning of the universe and of human life."[50] (Emphasis original)

Weller Embler echoes this "leap of faith" in metaphor and the arts, interestingly, in terms of the One and the Many.

> It is possible, after all, that something more than language, or the symbolism of the arts, is required for total meaning. *Language can go only so far; and beyond language, beyond meaning is existence — silence.* True we strive for total meaning through style, subject, context, relationships, and it may well be that in our most inspired moments we come close to total meaning, meaning as we under-

stand it in the linguistic and semantic sense. There comes to mind the poem "Ars Poetica" by Archibald MacLeish in which there are the lines "A poem should not mean/ But be." This suggests that *there may be in the arts some insights that are more than the sum of the rhetorical devices used to convey them,* something beyond metaphor whose meaning is solely the creation of the original, of the singular, of the one.[51] (Emphasis original)

Embler here expresses the faith of the evolution model, that by some mysterious means metaphor and the arts can be mediators between man and the ultimate meaning he seeks. But the irony is that Embler himself portrays what is "beyond language" as "silence." It is a Western echo of the Tao: The ultimate Meaning which can be spoken is not the real Meaning.

The problem with this mediatorial view of poetic language, or any man-conceived language, is best expressed by Emmett:

Our minds seem impelled to seek or to create significance in their world as a whole .... But, we ask, what warrant have we to suppose that the world views which result are more than the products of the mind's own impulse towards the creation of forms in which the imagination can rest, and a feeling of significance can be enjoyed? May not such world views, whether metaphysical or theological, prove in the end to be simply word patterns?[52]

It is evident from this honest observation that the naturalistic aspect of the evolution model has no resolution for the semantic dilemma of whether language truly corresponds to the nature of What Is.

Another characteristic of the evolution model one would expect to be represented in linguistic considerations is the *net increase in complexity* presumed by this theory. Language, according to the naturalistic presupposition, slowly evolved from primitive to more complex patterns by means of metaphoric activity and these mysterious conceptual ideas that "came" to the human species and forced development of linguistic skills. However, philologists have no evidence that this increasing complexity has occurred. In fact, the evidence is to the contrary. A noted anthropologist, Ralph Linton, writes:

We know absolutely nothing about the early stages in the development of language ....

The so-called primitive languages can throw no light on language origins since most of them are actually more complicated in grammar than the tongues spoken by civilized people.[53]

Even the staunch evolutionist George Gaylord Simpson states: "The oldest language that can reasonably be reconstructed is already modern, sophisticated, complete from an evolutionary point of view."[54]

Finally, the *uniformitarianism* of the evolution model has assumed that the present nature of the development of language has been roughly consistent and can therefore be used to extrapolate backward indefinitely in linguistic theory. Thus, on the unfounded assumption that linguistic development has *always* been the same, they posit theories of the origin of language as a human phenomenon and the variety of languages as a social phenomenon. To transfer biological terminology to this discussion, they exercise faith in a linguistic macro-evolution (chirps to Chaucer) on the scientific philological data that can only support micro-evolution. In the same sense that chimney

moths in England adapt, or evolve, to accommodate changing environments, but still remain chimney moths, language adapts and changes within certain linguistic boundaries, but has never been non-language; just as no signal system of animals has ever developed into conceptual langauge. Simpson confirms the absolute uniqueness of language to the human race:

> Human language is absolutely distinct from any system of communication in other animals. That is made most clear by comparison with other animal utterances, which most nearly resemble human speech and are most often called "speech." Non-human vocables are, in effect, interjections. They reflect the individual's physical or, more frequently emotional state. They do not, as true language does, name, discuss, abstract, or symbolize.[55]

Furthermore, as Morris points out, the evolution model cannot adequately explain the great variety of languages, on the one hand, and yet their structural unity which makes the science of linguistics possible, on the other.

The evolutionists cannot be assured of a true correlation between language and reality. To compensate, they are forced to a "leap of faith" in the mediatorial powers of metaphoric activity, but due to a naturalistic starting point are left with the spectre that their "truths" are no more than arbitrary word patterns. As a result, many serious thinkers have abandoned this faith and accepted the *logical conclusions* of bare naturalism; *i.e.*, there is no correlation between words and reality, between the phenomenal and the noumenal, no psycho-physical parallelism in the universe. These are the 20th century poets. Some have represented what is called "pure poetry." They have deliberately stripped words of meaning by making nonsensical word combinations, by playing games with words and finally by using them as bare sounds, declaring that a poem is pure only when it makes mere verbal music, devoid of meaning. There are no significant internal relationships among categories; thus, metaphor is nothing more than random combination. Richards, who of course objects to this tendency, quotes one of its adherents, Andre Breton, leader of the French Super-Realists:

> To compare two objects, as remote from one another in character as possible, or by any other method put them together in a sudden and strking fashion, this remains the highest task to which poetry can aspire.[56]

Wheelwright labels this type of metaphor "diaphoric," citing Gertrude Stein as an example with some of her random combinations, such as "Toasted Susie is my ice cream" and "A silence a whole waste of a desert spoon."[57] Stein, says Wheelwright, "in contriving such diaphoric word patterns, considered that she was reducing poetry to the status of music."

But perhaps most intriguing is his discussion on the relationship of diaphoric metaphor to the philosophy of evolution:

> The essential possibility of diaphor lies in the broad ontological fact that new qualities and new meanings can emerge, simply come into being, out of some hitherto ungrouped combination of elements. If one can imagine a state of the universe, perhaps a trillion years ago, before hydrogen atoms and oxygen atoms had ever come together, it may be presumed that up to that time water did not exist. Somewhere in the later vastitude of

time, then, water first came into being — when just those two necessary elements came together at last under the right conditions of temperature and pressure. Analogous novelties occur in the sphere of meanings as well. As in nature new qualities may be engendered by the coming together of elements in new ways, so too in poetry new suggestions of meaning can be engendered by the juxtaposition of previously unjoined words and images. Such diaphoric synthesis is indispensable as a factor in poetry.[58]

However, Wheelwright maintains that the diaphoric aspect of metaphor is only at its best in combination with epiphor, or the conventional cognitive, comparative aspect of metaphor, which indicates his (and many others') philosophical inconsistency; what he can trust alone to create water and worlds, he cannot trust to create poetry. This inconsistency is a dishonest but desperate attempt to hold on to the truth and beauty of metaphor, rather than admitting with Gertrude Stein that on an evolutionary base "A rose is a rose" and that is all it is.

2. In The Creation Model

The creation model, on the other hand, as declared in the historical record of Genesis, better correlates the data surrounding the problems of metaphor, language and ontology. The aspects of this correlation can best be organized under the three basic characteristic principles of the creation model discussed in Section II: 1) completed supernatural origin, 2) net decrease in complexity, and 3) historic catastrophism.

The completed supernatural origin of the creation applies directly to the language issue. The creation and transmission of language by the Creator as implied in Genesis 1-2 deals with the major problems encountered by the evolution model. *First,* rather than all language being derived, by metaphor, from the arbitrary sound-symbols of primitive man, *basic linguistic categories were transmitted to man by God,* from which metaphorical development could stem.

In Genesis 1:3 "God said, 'Let there be light'; and there was light." Notice in this narration that God uttered the word light before it came into being. The text could easily have said "God thought," but it does not. As a historical record, the text must be studied in light of what it actually says, not what modernists believe it "really means." It reads, "God said, 'Let there be light.'" Thus, language as man understands it, was created and spoken before the natural phenomena came into existence. The word light not only pre-existed the phenomenon of light, but in a real sense it defined or sculpted that piece of nature. That historical record leads to a most profound and applicable conclusion; namely, that the word for the natural phenomenon of light is perfectly correlated to the nature of light. And so the pattern is repeated throughout Genesis 1 for "firmament," "dry land," "vegetation," and "living creatures." The linguistic categories and basic vocabulary of the universe, then, were created and spoken by God at the beginning; thus, language, when first uttered by God, actually formed reality, and in consequence perfectly corresponded to the nature of What Is.

These linguistic categories, or what might be called the "general terms" of creation, were subdivided in the case of at least three categories, and perhaps

more. Genesis 1:5 says, "God called the light day, and the darkness he called night." This "calling" represents a naming process which God undertook in the early part of creation. He not only "spoke" the creation into being, but further "defined" it after its creation with words such as day, night, earth and heaven. The fairly obvious purpose for such a naming process (or one purpose) which is the same purpose for language itself, is communication — communication with man. Thus, the origin of human language was God's spoken language, perfectly correspondent to the physical objects He had created, and the subsequent transmission of that language to man.

The conclusion that man received his basic linguistic categories from God, whether by instruction or fiat creation, is supported by the implications of Genesis 2. After the creation of man, God talked to him. By Genesis 2 He probably had instructed Adam in His linguistic categories (or created him speaking) and was thus already able to communicate meaningfully. He had told man that he was man; He had told man of light, earth, heavens, living creatures.

Second, the creation model explains the well-established fact that *man has developed language by means of metaphor*, this development being founded upon the linguistic base given him by God. The very metaphorical/ analogical capability of man derives from his creation in the image of God. This explains the uniqueness of man as the only language-speaking creature. Unlike any of the other creatures, man was made, according to Genesis 1:27, in the image of God, *i.e.*,personal and intelligent, capable of speaking God's words and thinking God's thoughts after Him. This speaking ability is one of his major distinguishing features, as Simpson confirmed; and this job of naming, as Hubbard states, is one of his means of subduing. Thus the metaphorical development of language is only possible because of the analogical capability of man's mind in God's image.

Third, Wheelwright developed extensively the idea of the dependence of knowledge upon language,[59] and from this Embler rightly concludes: "More often than not, our thoughts do not select the words we use; instead, words determine the thoughts we have."[60] If this is true, and it is becoming more apparent among thinkers that it is, then the purity of man's knowledge is indeed subject to the purity of his words and metaphors. As much as philosophers may want to avoid this dependence on metaphor and seek a "purer" terminology, there is no true option in a philosophic context for man to speak *literally*. As C. S. Lewis succinctly states: "It is abundantly clear that the freedom is often only a freedom to choose between that metaphor and others."[61] In both the creation and evolution models, then, man is dependent on metaphoric activity which is built on a linguistic foundation. The difference in the models is the nature of that foundation. In evolution that word-foundation consists of arbitrary human sounds with no verifiable correspondence with the true nature of things. In the creation model, the base is the audible (not mystical) spoken words of God to man.

To see the centrality of metaphorical activity in man's language development, it is necessary to go back and pick up the Biblical record in Genesis 2. Here, God gave Adam the task of further naming the creation (2:19). From the word-foundation which God had already given him, the categories such as "cattle," "birds," and "beasts of the field" (2:20), man himself

was to "call," just as God had done. The interesting thing here is that man had to "create" names, in effect, develop language further by building upon the foundation the Creator had established. And, indeed, the means of that naming was exemplified in his first recorded act of naming, the naming of woman (Gen. 2:23):

And the man said,
'This is now bone of my bones
And flesh of my flesh;
She shall be called *Ishah*
Because she was taken out of *Ish.*'

He names woman *(Ishah)* in terms of man *(Ish)*. The first recorded words of man are a metaphor. The Hebrew word *Ishah* is a metaphorical derivative of *Ish.* Man's first naming was a metaphorical activity built upon the ontologically pure linguistic foundation given him by God.

These observations from Genesis 1-2 give reasonable solutions to the problems the evolution model faced but was unable to solve. The creation model answers the semantic dilemma presented by the humanistic naturalism of evolution. *First,* the word-foundation from which man metaphorically derives words was God-made, not the man-made, meaningless, arbitrary sound-symbols of evolution. Thus, they correspond with reality. When man then began to develop language metaphorically from the foundation, the metaphors also could be accurate and dependable, ontologically and epistemologically. *Second,* the basis for comparison between the diverse elements of creation, the learning of one from the other, and the basis for "semantic transgression" or the "system of associated commonplaces" is the overall unity of creation and its role as a reflector of the Creator and His Truth. Within the creation model, then, the earthly, or the phenomenal, is a legitimate way to learn both more about the phenomenal and some true facets of the heavenly, or the noumenal (Ps. 19; Rom. 1).

However, while the first man was capable of taking the pure language of God and developing perfect derivations through metaphor, another historic event in the Scriptural records which controls the creation model is the Fall of man (Gen. 3). As creation scientists have stated, the Second Law of Thermodynamics, or entropy, is a result of this historic event. Entropy, or the tendency of nature toward decay, confusion, and death affects all aspects of creation, even language. It is this decaying or confusing aspect of language that is central to the second principle of the creation model, *the net decrease in complexity.*

The Fall spoiled man's perfect perception and thus the metaphors which were derived from his perception. Therefore language would be expected to tend toward a decrease in complexity and accuracy, as man's metaphorical derivations became contaminated. The part of civilization closest to the pure language of the first man would be expected to have the most piercingly precise and complex linguistic delineations. And interestingly, as the words of Linton and Simpson attest, even the most primitive language available for philological study is still complex, and the expectations of evolutionary theory that early language would be simple and general have not been corroborated.[62] Indeed, the extant languages of early great civilizations are as comprehensive and poetically sophisticated as our own.

Linguistic entropy would also explain the numerous difficulties and break-downs in language and communication. Some have described metaphor as the wonderful process of change and adaptation by which language progresses up the evolutionary scale. This change is only "wonderful" if that process is an upward trend, but the upward direction of the evolutionary theory is a presupposition, not a fact. Rather, might the constant change and flux of language be a decay and "dying" of old words and the necessary creation of new ones because they were abused, distorted or confused by their users? This dying of excellent language systems has been witnessed throughout history, and the present-day abuse and resulting ambiguity of language is experienced in everyday living.

A final note seems appropriate for this discussion of the net decrease in complexity of language. Because men are unable to create new words in the sense God did, to create new, non-metaphorical, literal terms out of nothing, the pretense of doing so is a denial of creaturehood and the Fall. Man, finally, has no choice, as the metaphysicians would hope, between metaphor and pure abstraction. "We did not at first observe," writes Lewis, "that where we were promised a freedom from metaphor we were given only a power of changing the metaphors in rapid succession."[63] The irony is that if indeed autonomous man created a word with absolutely no metaphorical relation to any other word, he would be doing nothing more than emitting a meaningless, arbitrary sound-symbol, the activity which he ascribes to the most primitive of men. Would this not be considered a net decrease in complexity?

The third summary characteristic of the creation model, *historic catastrophism*, also has a key role in the development and nature of language. As mentioned earlier, a naturalistic upward development of language has no corroboration in philological studies, nor does the rise of extremely diverse languages throughout the world. These diverse basic language systems have no apparent "mother" language, nor any indications of such a familial relationship. They are distinctly different. On the other hand, they have a structural unity that spawned the science of linguistics. This unity and diversity are explained by another Biblical event by which the creation model of language must be defined. This event is the Tower of Babel.

Just as creation scientists find evidence for the physical catastrophism of the Noahic Flood which is the source of much geologic data, *linguistic catastrophism* exists similarly in the account of the Tower of Babel in Genesis 11. At one time, all men spoke the same language, basically the same language of Adam's family. The historic records of the "confusion of languages" by God's supernatural intervention is the *basis* for both the unity and diversity of the various language systems. This diversity and unity might be understood by comparison to the animal kingdom. While there are a vast variety of respiratory animals, there is a structural unity or similarity in the tissues, organs and systems of mammals, reptiles and birds. Likewise, while there is a great variety of mammals, there is a structural similarity between kangaroos and chimpanzees in that they are warm-blooded, mammalian and bear their infants live. By comparison the same diversity of "kinds" in the animal kingdom, as outlined in Genesis 1, appears in the linguistic kingdom, but not until Babel. A central conclusion to be drawn here is that the different language systems of the world also originated by the direct words and works of God,

not human social development over long periods of time. Thus, those who grant a supernatural birth for the origin of language, and yet persist in the human development of divergent languages, are not consistent with the creation model. Here again, the philological evidence for micro-evolution of languages (for example, the French and German influence upon the Anglo-Saxon tongue in the formation of the modern English language) is not a valid basis for the macro-evolution of the various language systems.

To summarize, language originated with God's own words, which He spoke to man. Upon this word-foundation, man then developed language by means of metaphor, having confidence in the underlying unity of all nature. With the Fall, this capability for perfect metaphorical development was destroyed, leaving metaphor a useful, but fallible tool. Finally the diversity of the world's language systems resulted from a supernatural intervention many generations later by the Creator of language.

In conclusion, metaphor and the metaphorical nature of language and thought are best explained in the light of the creation model and stand as evidence for its validity. The semantic ontological dilemma of the humanistic view of the origin of language presents insurmountable problems, and the "leap of faith" in metaphoric language by the evolutionary humanist is admitted by honest thinkers to be hollow indeed. The creation model alone gives meaning to language and metaphor.

Besides being of purely theoretical and teleological value, these discussions of the creation view of human language have tremendous pedagogical advantages. In a day when literary instruction frequently degenerates into relative and arbitrary modes of interpretation, the solidity of the Biblical view of language is a comfort. Language was intended to communicate specific meaning and to the degree that true communication does not occur, it is a verbal failure either by the speaker or by the hearer. There are precise interpretations for meaningful literature — skillful words do not "mean one thing to me" and "something else to you." To say this about the great literary works of history is to pridefully and ignorantly demean the articulate and talented men and women who skillfully created them. And the persistence of such views is one of the *means* of the net decrease in complexity of language and the breakdown of communication. The creation model gives the student confidence in the true significance of language. Language is not once-removed from reality, as the Tao and contemporary Western rhetoricians would have it; but the very words of God which He spoke to man are the words that molded the universe. And the student of language can know and be stimulated by the finite but nevertheless vast power of the words of a man made in the image of the speaking God.

While metaphor has been taught as a significant element of literature, it could be taught as the very principle of language and thought by which language develops and by which man perceives wisdom, as in the highly metaphoric wisdom literature of the Bible. Man's thought is derivative, derivative of the thoughts and words of God. This gives true vitality to metaphor, because there is hope of reaching true wisdom as men's metaphors conform to the nature of God's world, directed by the Truth of God's Word; there really is a psycho-physical parallelism in the universe. Metaphor is truly a means to wisdom. Thus, the literary and philosophical value of metaphor is indispens-

able to a full understanding of the very act of learning itself. Man's words and thoughts derive from God's words.

"The fear of the Lord is the beginning of wisdom." (Proverbs 1:7).

FOOTNOTES

41 *Ibid.*, p. 8, 17.

42 Percy Bysshe Shelley, cited in Wheelwright, p. 82.

Metaphor is a predominant literary aspect throughout the Bible. The prophets use metaphorical expression constantly in their poetic messages (*e.g.*, the extended metaphors of Ezekiel); the typology within Old Testament history is a metaphoric extension (*e.g.*, the book of Hebrews contains typological teaching); and the very parables of Jesus are obvious metaphors.

44 D. A. Hubbard, "The Wisdom Movement and Israel's Covenant Faith," *Tyndale Bulletin* 17 (1966), p. 22.

45 Wheelwright, p. 22.

46 Brown, p. 28.

47 *Ibid.*

48 Hudson Maxim, cited in Brown, p. 29.

49 Brown, p. 29.

50 Wheelwright, p. 130-131.

51 Embler, p. 137-138.

52 Emmett, p. 2.

53 Ralph Linton, *The Tree of Culture* (New York: Alfred A. Knopf, 1955), p.9 cited in Morris, p. 184-5.

54 George Gaylord Simpson, "The Biological Nature of Man," *Science*, Vol. 152 (April 22, 1966), p. 477, cited by Morris, p. 185.

55 *Ibid.*, p. 476, cited in Morris, p. 183. For those who may be inclined to amalgamate the creation and evolution theories, it is interesting to note that the first thing the Bible records man doing verbally is naming (Gen. 2); and the second, discussing (Gen. 3). The problem for the theistic evolutionist, then, is that the first man is recorded as doing the very thing which separates him most radically from the animals.

56 As cited in Richards, p. 123.

57 Wheelwright, p. 79.

58 *Ibid.*, p. 85-86.

59 *Ibid.*, p. 26.

60 Embler, p. iv.

61 Lewis, p. 46.

62 Another note regarding amalgamation of the evolution and creation models of language: the evolutionary scenario, of course, would never have early man using any word that he had not derived from sense experience. How, then, could Eve use the word "death" with the serpent in Genesis 3 when she had had no experiential encounter with this phenomenon?

63 Lewis, p. 47.

BIBLIOGRAPHY

Aristotle. *Poetics.*

Berggren, Douglas Charles. "An Analysis of Metaphorical Meaning and Truth." Unpublished Ph.D. dissertation, Yale University, 1959.

Black, Max. *Models and Metaphors.* Ithaca, NY: Cornell University Press, 1962.

Brown, Stephen J. *The World of Imagery.* New York: Russell and Russell, 1927.

Deere, Jack S. "Metaphor in The Song of Songs." Unpublished Master's thesis, Dallas Theological Seminary, 1975.

Embler, Weller. *Metaphor and Meaning.* DeLand, FA: Everett/Edwards, Inc., 1966.

Emmett, Dorothy M. *The Nature of Metaphysical Thinking.* London: Mac-Millan and Co., LTD., 1953.

Hubbard, D.A. "The Wisdom Movement and Israel's Covenant Faith," Tyndale Bulletin 17, 1966.

Lewis, C. S. "Bluspels and Flalansferes," *The Importance of Language.* Max Black, editor. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1962.

Morris, Henry M. *Scientific Creationism.* San Diego, CA: Creation-Life Publishers, 1974.

Oxford English Dictionary.

Richards, I. A. *The Philosophy of Rhetoric.* New York: Oxford University Press, 1936.

Wheelwright, Philip. *Metaphor and Reality.* Bloomington: Indiana University Press, 1967.

Zimmerman, Paul A. *Darwin, Evolution, and Creation.* Concordia Publishing House: St. Louis, MO., 1959.

Psalm 8

7-26-78
Ellen Myers

Soli Deo Gloria

Largo maestoso

How ex- cel - lent is Thy name-; o- LORD, Who made the world By Christ Thy Word. A- bove the hea-vens is set Thy glo-ry. And what is man, that Thou vi- si- tet him?

For Thou hast made us in Thy own im-age, and gav-est us do-mi-nion o'er the works of Thy hands.

rall.....

And out of the mouth of babes and suck-lings wilt Thou con-found the e - ne-my. The foo-lish-ness of God is wi- ser than

men! The weak-ness of God is strong-er than men!

How ex- cel- lent is Thy name-, o - Lord, Who made the-

world by- Christ- Thy Word! A - - men! -

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